UNITED STATES PATENT AND TRADEMARK OFFICE

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09/837,844	04/18/2001	Adrian Yap	PD-200297	3966

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RAMAN, USHA

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 December 2007*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,7-11,13-21,23-60,62-66,68-76 and 78-109* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7-11,13-21,23-60,62-66,68-76 and 78-109* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date *1-25-08*.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

DETAILED ACTION

Miscellaneous

In view of the Appeal Brief filed on December 21st, 2007, PROSECUTION IS

HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the

following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply

under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed

by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and

appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth

in 37 CFR 41.20 have been increased since they were previously paid, then appellant

must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by

signing below:

/Chris Kelley/

Supervisory Patent Examiner, Art Unit 2623

Response to Arguments

1. Applicant's arguments with respect to claims 1 and 56 have been considered but are

    moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 13-17, 20, 23-29, 34-37, 56, 68-72, 75, 78-84, 89-92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vallone et al. (US Pat. 6,847,778) in view of Liebenow (US Pat. 6,601,074), Ranta et al. (US PG Pub. 2005/0204400) and Moseley et al. "Mastering Microsoft Office 97 Professional Edition".

    In regards to claims 1 and 56, Vallone discloses a method of processing available content, comprising receiving the available content using a first tuner of one or more tuners and performing at least one of a plurality of operations on the available content received from the one tuner, including recording a plurality of contents selectable for later viewing. See Vallone: column 4, lines 52-60, column 20, lines 24-30.

    Vallone does not disclose a plurality of operations includes selecting at least one recorded event from the available content based on a thumbnail, preview or snippet or tracking a list of recorded programs for duplicates when a record operation is initiated and activating a preference to erase a recording of a program that is identified as a duplicate.

    Liebenow discloses the step of tracking a list of recordings for duplicate wherein a program identified as a duplicate is recorded when it is available in a

higher quality, see column 5, lines 26-46.   Liebenow is silent on the step of

activating a preference to erase a recording of the lower quality duplicate

program. It should be noted however, that Liebenow discloses that it is

undesirable to house multiple copies of the same program so as to no waste

media storage space (see column 2, lines 4-6). Ranta further teaches the step of

replacing a lower quality instance of a data that is already stored in a memory

with a higher quality instance of the data (see [0050]). Accordingly Ranta bears

evidence to one of ordinary skill in the art at the time of the invention for erasing

a lower quality version of a data in favor of storing a higher quality version when

it is available. Moseley discloses the method of activating a prompt for

confirming a replacement when a system replaces a file. Accordingly, it would be

advantageous to apply the well known principle of activating a prompt when a

system is attempting to replace a file, thereby allowing the viewer to confirm

replacement (and therefore the deletion) of the original file.

All the claimed features were known in the prior art, viz. Liebenow taught

tracking a list of recorded programs for duplicates when a record program is

initiated, Ranta taught erasing an existing lesser quality of data in favor of the

better quality of that data, and Moseley discloses the well known step of

activating preference to confirm the replacement of a file thereby activating a

preference to confirm the erasing of the first file and allowing the user to decide

if, when and how a data should be erased. Accordingly one skilled in the art

could have combined the elements as claimed by known methods with no

change in their respective functions, and the combination would have yielded

predictable results to one of ordinary skill in the art at the time of the invention.

One ordinary skilled in the art would have been motivated to combine the prior

art features so as to not waste media storage space with multiple copies of the

same program.

In regards to claims 13, 14 and 15 and 68-70, the modified system does

not disclose the step of displaying status of a program including a current delay

that allows the user to see how far a recording is behind live feed when pausing

a live signal.

Vallone discloses the step of recording a live program, wherein a trick play

bar and cache bar are overlaid and indicate the visual reference points indicating

where the live recording is at (cache bar) and where the current slider is at when

the user pauses live signal. See figure 26 and description in column 18, lines 39-

44, lines 55-61, and column 19, lines 60-65.

It would have been obvious to one of ordinary skill in the art at the time of

the invention to further modify the system in view of Vallone by displaying a

current delay that allows the user to see how far a recording is behind live feed

when pausing a live signal. The motivation is to give the user a visual reference

point on the current viewing location of the program.

Claims 16, 17, 71 and 72, it is noted that claim 14, reciting 'the status may

include a current delay, a status indicator, available record time, medium

capacity, out of space alert or attributes" is written in the alternative language and therefore are anticipated by the modified system.

In regards to claims 20 and 75, the paused programming and permanent programming is stored in different portions of at least one storage medium, wherein the paused programming is stored in a buffer/cache of the storage medium. See Vallone: column 9, lines 44-48, 61-67 and column 10, lines 1-3.

In regards to claims 23 and 78, Vallone discloses a method of processing available content comprising: receiving the available content using one or more tuners, and performing at least one of a plurality of operations on the available content from the one tuner (see Vallone: column 4, lines 52-60, column 20, lines 24-30), wherein the performing step includes permitting a user to capture and store a snippet of digital audio/video from the available content (see Vallone: column 19, lines 40-47; Vallone discloses the step of recording a partial program and therefore a "snippet" of the digital audio/video from the available content).

In regards to claims 24 and 79, the snippet is saved to an external device. See Vallone: column 15, lines 20-21, column 12, lines 54-58.

In regards to claims 25 and 80, the external device is a computer, high-density disk, or CDR. See Vallone: column 12, lines 54-58; wherein a DVD is a high-density disk.

In regards to claims 26 and 81, the digital audio/video from the available content (in MPEG format) is decoded (MPEG decoder 715). See Vallone: column 7, lines 33-35.

In regards to claims 27 and 82, the digital audio/video from the available content is encoded (MPEG encoder). See Vallone: column 6, lines 64-65.

In regards to claims 28 and 83, the digital audio/video is converted to analog data (see Vallone: column 4, lines 41-45; MPEG decoder decodes digital signal for producing an analog TV signal).

In regards to claim 29 and 84, wherein the external device is a VCR or other analog mass storage device. See Vallone: column 15, lines 20-21.

In regards to claims 34 and 89, the modified system does not disclose that the performing step includes enabling a user to jump back from a live broadcast to a last paused video segment.

Vallone discloses the step of enabling a user to jump back from a live broadcast to a last paused video segment (via bookmarks). See Vallone: column 15, lines 34-43.

It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the system in view of Vallone, by creating bookmarks thereby allowing a viewer to jump back to a last paused video segment. The motivation is to allow the user to continue watching the video where it was last stopped.

In regards to claims 35 and 90, the jump back is triggered by a remote control. See Vallone: column 15, lines 57-62.

In regards to claims 36 and 91, after resuming a live broadcast from a

paused program, the jump back is back to a last paused point (i.e. last stopped

point). See Vallone: column 15, lines 34-43.

In regards to claims 37 and 92, after the jump back, the paused program

is played back from the last pause point. See Vallone: column 15, lines 34-43.

4. Claims 1, 13-21, 23-29, 34-37, 56, 68-76, 78-84, 89-92 are rejected under 35

U.S.C. 103(a) as being unpatentable over Vallone et al. (US Pat. 6,847,778) in view

of Liebenow (US Pat. 6,601,074), Ranta et al. (US PG Pub. 2005/0204400) and

Browne et al. (WO 92/22983).

In regards to claims 1 and 56, Vallone discloses a method of processing

available content, comprising receiving the available content using a first tuner of

one or more tuners and performing at least one of a plurality of operations on the

available content received from the one tuner, including recording a plurality of

contents selectable for later viewing. See Vallone: column 4, lines 52-60, column

20, lines 24-30.

Vallone does not disclose a plurality of operations includes selecting at

least one recorded event from the available content based on a thumbnail,

preview or snippet or tracking a list of recorded programs for duplicates when a

record operation is initiated and activating a preference to erase a recording of a

program that is identified as a duplicate.

Liebenow discloses the step of tracking a list of recordings for duplicate

wherein a program identified as a duplicate is recorded when it is available in a

higher quality, see column 5, lines 26-46.   Liebenow is silent on the step of

activating a preference to erase a recording of the lower quality duplicate

program. It should be noted however, that Liebenow discloses that it is

undesirable to house multiple copies of the same program so as to no waste

media storage space (see column 2, lines 4-6). Ranta further teaches the step of

replacing a lower quality instance of a data that is already stored in a memory

with a higher quality instance of the data (see [0050]). Accordingly Ranta bears

evidence to one of ordinary skill in the art at the time of the invention for erasing

a lower quality version of a data in favor of storing a higher quality version when

it is available. Browne teaches the step of activating a preference in order to

erase a recording of any program (see figure 3 and page 19, lines 6-30) so as

free up media storage space for additional recording. By activating a preference

to erase recordings, gives the user to control over when and how data should be

deleted. Browne further teaches the step of selecting at least one recorded

event from the available content based on a thumbnail. See fig. 11 and page 30,

lines 20-33.

All the claimed features were known in the prior art, viz. Liebenow taught

tracking a list of recorded programs for duplicates when a record program is

initiated, Ranta taught erasing an existing lesser quality of data in favor of the

better quality of that data, and Brown discloses activating a preference to erase a

recording thereby allowing the user to decide if, when and how a data should be

erased. Accordingly one skilled in the art could have combined the elements as

claimed by known methods with no change in their respective functions, and the

combination would have yielded predictable results to one of ordinary skill in the

art at the time of the invention. One ordinary skilled in the art would have been

motivated to combine the prior art features so as to not waste media storage

space with multiple copies of the same program.

In regards to claims 13, 14 and 15 and 68-70, the modified system does

not disclose the step of displaying status of a program including a current delay

that allows the user to see how far a recording is behind live feed when pausing

a live signal.

Vallone discloses the step of recording a live program, wherein a trick play

bar and cache bar are overlaid and indicate the visual reference points indicating

where the live recording is at (cache bar) and where the current slider is at when

the user pauses live signal. See figure 26 and description in column 18, lines 39-

44, lines 55-61, and column 19, lines 60-65.

It would have been obvious to one of ordinary skill in the art at the time of

the invention to further modify the system in view of Vallone by displaying a

current delay that allows the user to see how far a recording is behind live feed

when pausing a live signal. The motivation is to give the user a visual reference

point on the current viewing location of the program.

Claims 16, 17, 71 and 72, it is noted that claim 14, reciting 'the status may

include a current delay, a status indicator, available record time, medium

capacity, out of space alert or attributes" is written in the alternative language and therefore are anticipated by the modified system.

In regards to claims 18, 19, 73 and 74, the pause time window is maintained in a buffer in the modified system. Browne discloses that programs are temporarily cached in FIFO buffers and upon user selection, added to stored programs or 'permanent storage'. See page 8, lines 14-23. Browne also discloses the step of prompting the user when a memory runs low. See page 25, lines 28-32. Therefore, it would have been obvious to further modify the system so that a user is alerted when a buffer is almost full, and upon selection from a user to retain the program in buffer, permanently storing the buffer contents.

In regards to claims 20 and 75, the paused programming and permanent programming is stored in different portions of at least one storage medium, wherein the paused programming is stored in a buffer/cache of the storage medium. See Vallone: column 9, lines 44-48, 61-67 and column 10, lines 1-3.

In regards to claims 21 and 76, the modified system implements a circular buffers with pointers for capturing paused events as taught by Vallone. Browne further discloses dedicating a portion of storage to FIFO buffers for continuous buffering (see page 13, lines 5-10, page 20, lines 28-31.

In regards to claims 23 and 78, Vallone discloses a method of processing available content comprising: receiving the available content using one or more tuners, and performing at least one of a plurality of operations on the available content from the one tuner (see Vallone: column 4, lines 52-60, column 20, lines

24-30), wherein the performing step includes permitting a user to capture and store a snippet of digital audio/video from the available content (see Vallone: column 19, lines 40-47; Vallone discloses the step of recording a partial program and therefore a "snippet" of the digital audio/video from the available content).

In regards to claims 24 and 79, the snippet is saved to an external device. See Vallone: column 15, lines 20-21, column 12, lines 54-58.

In regards to claims 25 and 80, the external device is a computer, high-density disk, or CDR. See Vallone: column 12, lines 54-58; wherein a DVD is a high-density disk.

In regards to claims 26 and 81, the digital audio/video from the available content (in MPEG format) is decoded (MPEG decoder 715). See Vallone: column 7, lines 33-35.

In regards to claims 27 and 82, the digital audio/video from the available content is encoded (MPEG encoder). See Vallone: column 6, lines 64-65.

In regards to claims 28 and 83, the digital audio/video is converted to analog data (see Vallone: column 4, lines 41-45; MPEG decoder decodes digital signal for producing an analog TV signal).

In regards to claim 29 and 84, wherein the external device is a VCR or other analog mass storage device. See Vallone: column 15, lines 20-21.

In regards to claims 34 and 89, the modified system does not disclose that the performing step includes enabling a user to jump back from a live broadcast to a last paused video segment.

Vallone discloses the step of enabling a user to jump back from a live

broadcast to a last paused video segment (via bookmarks). See Vallone: column

15, lines 34-43.

It would have been obvious to one of ordinary skill in the art at the time of

the invention to further modify the system in view of Vallone, by creating

bookmarks thereby allowing a viewer to jump back to a last paused video

segment. The motivation is to allow the user to continue watching the video

where it was last stopped.

In regards to claims 35 and 90, the jump back is triggered by a remote

control. See Vallone: column 15, lines 57-62.

In regards to claims 36 and 91, after resuming a live broadcast from a

paused program, the jump back is back to a last paused point (i.e. last stopped

point). See Vallone: column 15, lines 34-43.

In regards to claims 37 and 92, after the jump back, the paused program

is played back from the last pause point. See Vallone: column 15, lines 34-43.

5. Claims 1-5, 7-11, 56-50 and 62-66 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Browne et al. (WO 92/22983) in view of Liebenow (US Pat.

6,601,074) and Ranta et al. (US PG Pub. 2005/0204400).

In regards to claims 1 and 56, Browne discloses the method of processing

available content comprising the steps of: receiving available content using one

ore more tuners (see page 9, lines 21-26), and performing at least one of a

plurality of operations on the available content received from the one tuner

including selecting at least one recorded event from the available content based

on a thumbnail, preview or snippet or setting a preference to erase programs

identified as duplicates. See page 30, lines 20-33, and figure 11. Browne does

not teach the step of tracking a list of recorded programs for duplicates when a

record operation is initiated.

Liebenow discloses the step of tracking a list of recordings for duplicate

wherein a program identified as a duplicate is recorded when it a higher quality

recording is possible, see column 5, lines 26-46. It should be noted however,

that Liebenow discloses that it is undesirable to house multiple copies of the

same program so as to no waste media storage space (see column 2, lines 4-6).

Ranta further teaches the step of replacing a lower quality instance of a data that

is already stored in a memory with a higher quality instance of the data (see

[0050]). Accordingly Ranta bears evidence to one of ordinary skill in the art at

the time of the invention for erasing a lower quality version of a data in favor of

storing a higher quality version when it is available. Furthermore, it is noted that

Browne teaches the step of activating a preference in order to erase a recording

of any program (see figure 3 and page 19, lines 6-30) so as free up media

storage space for additional recording. By activating a preference to erase

recordings, gives the user to control over when and how data should be deleted.

Browne further teaches the step of selecting at least one recorded event from the

available content based on a thumbnail. See fig. 11 and page 30, lines 20-33.

All the claimed features were known in the prior art, viz. tracking a list of recorded programs for duplicates when a record program is initiated was taught by Liebenow, erasing an existing lesser quality of data in favor of the better quality of that data was taught by Ranta, and activating a preference to erase a recording thereby allowing the user to decide if, when and how a data should be erased was taught by Brown. Accordingly one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. One ordinary skilled in the art would have been motivated to combine the prior art features so as to not waste media storage space with multiple copies of the same program. One would have been motivated to do so to give the user automatic precautions before something is deleted.

In regards to claim 2 and 57, Browne teaches selecting at least one recording event from the available content based on keyword (see fig. 11).

In regards to claims 3 and 58, Brown teaches the selecting is initiated via a mouse (i.e. "remote control"). See page 30, lines 29-31.

In regards to claims 4 and 59, the selecting is achieved by a user browsing through information related to the available content stored on at least one storage medium. See Brown: page 30, lines 5-13.

In regards to claims 5, 7, 11, 60, 62, and 66, the modified system discloses the step of checking for duplicates when attempting to record a

program from available content that has already been recorded on the storage

medium, as discussed in claim 1 above. The modified system is silent on the

step of sending a notification to a user when attempting to record a duplicate

program.

Examiner takes official notice that it was well known in the art at the time

of the invention to send notification alerts to users to update them on a status.

It would have been obvious to one of ordinary skill in the art at the time of

the invention to modify the system by sending alerts and program identification

information when a recording is identified to let the user know there is already a

recording of the program available.

With regards to claims 9 and 64, he modified system discloses the step of

checking for characteristics of duplicates when attempting to record a program

from available content that has already been recorded on the storage medium

(as disclosed by Liebenow), as discussed in claim 1 above. The modified system

further discloses the step of displaying recorded contents and contents being

recorded (see Browne page 24, lines 18-23 and figure 6) in storage section are

displayed. Therefore it would have been obvious to one of ordinary skill in the art

to further modify the system to displaying the screen (600) to the user for

displaying characteristics of the recorded programs and recording programs

when the duplicates have been identified.

In further regards to claims 11 and 66, Liebenow discloses the step of

identifying a duplicate of a program prior to starting a recording. If duplicate is

identified, the modified sends a notification to the user. The system further

allows the user to delete any program a user has recorded to be erased (e.g. if a

user selects a duplicate recording to be erased). See Brown, fig. 3

With regards to claims 10 and 65, the modified system discloses the step

of checking for characteristics of duplicates when attempting to record a program

from available content that has already been recorded on the storage medium

(as disclosed by Liebenow), as discussed in claim 1 above. The modified system

further discloses the step of displaying recorded contents and contents being

recorded (see Browne page 24, lines 18-23 and figure 6) in storage section are

displayed.

Examiner takes official notice that it was well known in the art at the time

of the invention to send notification alerts to users.

Therefore it would have been obvious to one of ordinary skill in the art to

further modify the system by sending the user a notification alert when a

duplicate is identified and giving the viewer the option to view the matched

duplication by displaying a screen of recorded and recording programs. The

motivation is to let the user know there is already a recording of the program

available.

6. Claims 1-2, 30-31, 38-47, 50, 53-57, 85-86, 93-96, 104, and 107-109 are rejected

under 35 U.S.C. 103(a) as being unpatentable over Wood et al. (US Pre Grant Pub.

2002/0054752) in view of Liebenow (US Pat. 6,601,074), Ranta et al. (US PG Pub.

2005/0204400) and Browne et al. (WO 92/22983).

In regards to claims 1 and 56, Wood discloses a method of processing available content, comprising: receiving the available content using one or more tuners (i.e. video input source); and performing at least one of a plurality of operations on the available content received from the one tuner. See Wood: abstract, [0032].

Wood lacks a plurality of operations includes selecting at least one recorded event from the available content based on a thumbnail, preview or snippet or tracking a list of recorded programs for duplicates when a record operation is initiated and activating a preference to erase a recording of a program that is identified as a duplicate.

Liebenow discloses the step of tracking a list of recordings for duplicate wherein a program identified as a duplicate is recorded when it is available in a higher quality, see column 5, lines 26-46.   Liebenow is silent on the step of activating a preference to erase a recording of the lower quality duplicate program. Browne teaches the step of activating a preference to erase a recording of any program (see page 19, lines 6-30 and figure 3). For example, a user could select duplicate programs for erasure. Browne further teaches the step of selecting at least one recorded event from the available content based on a thumbnail. See fig. 11 and page 30, lines 20-33.

Liebenow discloses the step of tracking a list of recordings for duplicate wherein a program identified as a duplicate is recorded when it a higher quality recording is possible, see column 5, lines 26-46. It should be noted however,

that Liebenow discloses that it is undesirable to house multiple copies of the

same program so as to no waste media storage space (see column 2, lines 4-6).

Ranta further teaches the step of replacing a lower quality instance of a data that

is already stored in a memory with a higher quality instance of the data (see

[0050]). Accordingly Ranta bears evidence to one of ordinary skill in the art at

the time of the invention for erasing a lower quality version of a data in favor of

storing a higher quality version when it is available. Browne teaches the step of

activating a preference in order to erase a recording of any program (see figure 3

and page 19, lines 6-30) so as free up media storage space for additional

recording. By activating a preference to erase recordings, gives the user to

control over when and how data should be deleted. Browne further teaches the

step of selecting at least one recorded event from the available content based on

a thumbnail. See fig. 11 and page 30, lines 20-33.

All the claimed features were known in the prior art, viz. tracking a list of

recorded programs for duplicates when a record program is initiated was taught

by Liebenow, erasing an existing lesser quality of data in favor of the better

quality of that data was taught by Ranta, and activating a preference to erase a

recording thereby allowing the user to decide if, when and how a data should be

erased was taught by Brown. Accordingly one skilled in the art could have

combined the elements as claimed by known methods with no change in their

respective functions, and the combination would have yielded predictable results

to one of ordinary skill in the art at the time of the invention. One ordinary skilled

in the art would have been motivated to combine the prior art features so as to not waste media storage space with multiple copies of the same program.

In regards to claim 2 and 57, the performing step includes selecting at least one recorded event from the available content, based on actor, actress, director, program title, key word, key phrase, tag information, synopsis, release date, critical review, related program, sequel, thumbnail, preview, or snippet. See Wood: [0040].

In regards to claims 30 and 85, the performing step includes permitting a user to rewind recording in an increment for playback of a portion of the available content (see Wood: [0031]).

In regards to claims 31 and 86, Wood does not disclose that the rewind increment corresponds to a duration a remote control button is depressed.

Examiner takes official notice that rewinding a recorded content in an increment corresponding to a duration a remote control button is depressed is well known in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Wood by rewinding a recorded content in an increment corresponding to a duration a remote control button is depressed. The motivation is to allow the user to easily control the rewind duration.

In regards to claim 38 and 93, the system further comprises the steps of: creating a personalized database from the available content. See Wood: [0040] and [0064]

In regards to claim 39 and 94, the creating step includes:

Receiving an electronic program guide with available content (see Wood: abstract, [0026], [0035]);

Receiving preferences indicating potentially desired content (see Wood: [0028]);

Scanning the electronic program guide for the potentially desired content (see Wood: [0028], [0037]);

Recording the potentially desired content located by said scanning (see Wood: [0028]);

Aggregating a library of potentially desired content by iterating said scanning and recording steps (see Wood: [0039], [0051], and [0059]);

Creating a database, which catalogs the potentially desired content (see Wood: [0040], [0064]);

Selecting content from the database and permitting on-demand viewing of the selected content from the library of potentially desired content by a user (see Wood: [0040]).

In regards to claim 40, the system further comprises the steps of: determining a schedule of the potentially desired content; and resolving conflicts in the schedule; said recording step recording the potentially desired content according to the resolved schedule. See Wood: [0032], [0038], [0039], [0043].

In regards to claim 41, the system further comprises the step of: permitting a user to edit the library of potentially desired content. See Wood: [0056].

In regards to claim 42, the system further comprises the step of: permitting a user to organize the library of potentially desired content. See Wood: [0059]-[0060].

In regards to claim 43, the system further comprises the step of: permitting a user to add at least one comment to at least one portion of the library of potentially desired content. See Wood: [0060]

In regards to claim 44, the system further comprises the steps of: waiting until the potentially desired content is about to be broadcast (see Wood: [0037]), said recording step synchronizing the recording according to said waiting step (see Wood: [0038]).

In regards to claim 45, the inputting step includes inputting criteria indicating one or more potentially desired content. See Wood: [0042], [0043].

In regards to claim, 46, the inputting step includes determining potentially desired content selections based on previously selected content. See Wood: [0053]-[0054]

In regards to claim 47, the recording step is performed on at least one storage medium. See Wood: [0028], [0029].

In regards to claim 50 and 104, Wood does not disclose the step of providing a synch pulse to confirm availability of the at least one storage medium.

Official notice is taken that polling is a well-known technique used for confirming the availability of devices (i.e. devices can be polled to see if they are active).

It would be obvious to one of ordinary skill in the art at the time of the invention to modify Wood by using polling ("synch pulse") to check storage device status for availability, in order to establish further communication with the device. The motivation is to ensure that the storage medium is active and available for data transfers.

In regards to claim 53 and 107, the potentially desired content includes a first content and a second content, wherein the method further comprises: simultaneously recording the first content and the second content. See Wood: [0037], [0038].

In regards to claim 54 and 108, the potentially desired content includes a first content, a second content and a third content, wherein the method further comprises: determining whether the recording of the first content has been completed; simultaneously recording the second and the third content. See Wood: [0032], [0037], [0038] and figure 2.

In regards to claim 55 and 109, the potentially desired content includes a first content and a second content, wherein method further comprises: performing on demand play back of the first and/or second content simultaneous with the recording of the first and/or second content; and performing on demand play back of the second and/or third content simultaneous with the recording of the second and/or third content. See Wood: [0032], [0038].

In regards to claim 95, the apparatus further comprises: a display device operatively connected to said at least one storage medium, said display device

receiving the played-back content from said at least one storage medium and

displaying the played-back content (i.e. video output source 107 coupled to the

video recorder device and storage medium (105). See Wood: [0032], [0029]).

In regards to claim 96, the apparatus comprises: receiving device and said

control unit being provided in a unit (i.e. VDR and processor 101 in one unit see

page 1 [0024]), said at least one storage medium external to the unit and

operatively connected to the unit (i.e. output source coupled to another video

data recorder, therefore external. See Wood: [0032].

7. Claims 1-2, 30-31, 38-47, 50, 53-57, 85-86, 93-96, 104, and 107-109 are rejected

under 35 U.S.C. 103(a) as being unpatentable over Wood et al. (US Pre Grant Pub.

2002/0054752) in view of Liebenow (US Pat. 6,601,074), Ranta et al. (US PG Pub.

2005/0204400) and Moseley et al. "Mastering Microsoft Office 97 Professional

Edition".

In regards to claims 1 and 56, Wood discloses a method of processing

available content, comprising: receiving the available content using one or more

tuners (i.e. video input source); and performing at least one of a plurality of

operations on the available content received from the one tuner. See Wood:

abstract, [0032].

Wood lacks a plurality of operations includes selecting at least one

recorded event from the available content based on a thumbnail, preview or

snippet or tracking a list of recorded programs for duplicates when a record

operation is initiated and activating a preference to erase a recording of a program that is identified as a duplicate.

Liebenow discloses the step of tracking a list of recordings for duplicate wherein a program identified as a duplicate is recorded when it is available in a higher quality, see column 5, lines 26-46. Liebenow is silent on the step of activating a preference to erase a recording of the lower quality duplicate program. Browne teaches the step of activating a preference to erase a recording of any program (see page 19, lines 6-30 and figure 3). For example, a user could select duplicate programs for erasure. Browne further teaches the step of selecting at least one recorded event from the available content based on a thumbnail. See fig. 11 and page 30, lines 20-33.

Liebenow discloses the step of tracking a list of recordings for duplicate wherein a program identified as a duplicate is recorded when it a higher quality recording is possible, see column 5, lines 26-46. It should be noted however, that Liebenow discloses that it is undesirable to house multiple copies of the same program so as to no waste media storage space (see column 2, lines 4-6). Ranta further teaches the step of replacing a lower quality instance of a data that is already stored in a memory with a higher quality instance of the data (see [0050]). Accordingly Ranta bears evidence to one of ordinary skill in the art at the time of the invention for erasing a lower quality version of a data in favor of storing a higher quality version when it is available.

Accordingly Ranta bears evidence to one of ordinary skill in the art at the time of the invention for erasing a lower quality version of a data in favor of storing a higher quality version when it is available. Moseley discloses the method of activating a prompt for confirming a replacement when a system replaces a file. Accordingly, it would be advantageous to apply the well known principle of activating a prompt when a system is attempting to replace a file, thereby allowing the viewer to confirm replacement (and therefore the deletion) of the original file.

All the claimed features were known in the prior art, viz. Liebenow taught tracking a list of recorded programs for duplicates when a record program is initiated, Ranta taught erasing an existing lesser quality of data in favor of the better quality of that data, and Moseley discloses the well known step of activating preference to confirm the replacement of a file thereby activating a preference to confirm the erasing of the first file and allowing the user to decide if, when and how a data should be erased. Accordingly one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. One ordinary skilled in the art would have been motivated to combine the prior art features so as to not waste media storage space with multiple copies of the same program.

In regards to claim 2 and 57, the performing step includes selecting at least one recorded event from the available content, based on actor, actress, director, program title, key word, key phrase, tag information, synopsis, release date, critical review, related program, sequel, thumbnail, preview, or snippet. See Wood: [0040].

In regards to claims 30 and 85, the performing step includes permitting a user to rewind recording in an increment for playback of a portion of the available content (see Wood: [0031]).

In regards to claims 31 and 86, Wood does not disclose that the rewind increment corresponds to a duration a remote control button is depressed.

Examiner takes official notice that rewinding a recorded content in an increment corresponding to a duration a remote control button is depressed is well known in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Wood by rewinding a recorded content in an increment corresponding to a duration a remote control button is depressed. The motivation is to allow the user to easily control the rewind duration.

In regards to claim 38 and 93, the system further comprises the steps of: creating a personalized database from the available content. See Wood: [0040] and [0064]

In regards to claim 39 and 94, the creating step includes:

Receiving an electronic program guide with available content (see Wood:

abstract, [0026], [0035]);

Receiving preferences indicating potentially desired content (see Wood: [0028]);

Scanning the electronic program guide for the potentially desired content (see

Wood: [0028], [0037]);

Recording the potentially desired content located by said scanning (see Wood:

[0028]);

Aggregating a library of potentially desired content by iterating said scanning and

recording steps (see Wood: [0039], [0051], and [0059]);

Creating a database, which catalogs the potentially desired content (see Wood:

[0040], [0064]);

Selecting content from the database and permitting on-demand viewing of the

selected content from the library of potentially desired content by a user (see

Wood: [0040]).

In regards to claim 40, the system further comprises the steps of:

determining a schedule of the potentially desired content; and resolving conflicts

in the schedule; said recording step recording the potentially desired content

according to the resolved schedule. See Wood: [0032], [0038], [0039], [0043].

In regards to claim 41, the system further comprises the step of: permitting

a user to edit the library of potentially desired content. See Wood: [0056].

In regards to claim 42, the system further comprises the step of: permitting

a user to organize the library of potentially desired content. See Wood: [0059]-

[0060].

In regards to claim 43, the system further comprises the step of: permitting

a user to add at least one comment to at least one portion of the library of

potentially desired content. See Wood: [0060]

In regards to claim 44, the system further comprises the steps of: waiting

until the potentially desired content is about to be broadcast (see Wood: [0037]),

said recording step synchronizing the recording according to said waiting step

(see Wood: [0038]).

In regards to claim 45, the inputting step includes inputting criteria

indicating one or more potentially desired content. See Wood: [0042], [0043].

In regards to claim, 46, the inputting step includes determining potentially

desired content selections based on previously selected content. See Wood:

[0053]-[0054]

In regards to claim 47, the recording step is performed on at least one

storage medium. See Wood: [0028], [0029].

In regards to claim 50 and 104, Wood does not disclose the step of

providing a synch pulse to confirm availability of the at least one storage medium.

Official notice is taken that polling is a well-known technique used for

confirming the availability of devices (i.e. devices can be polled to see if they are

active).

It would be obvious to one of ordinary skill in the art at the time of the

invention to modify Wood by using polling ("synch pulse") to check storage

device status for availability, in order to establish further communication with the

device. The motivation is to ensure that the storage medium is active and

available for data transfers.

In regards to claim 53 and 107, the potentially desired content includes a

first content and a second content, wherein the method further comprises:

simultaneously recording the first content and the second content. See Wood:

[0037], [0038].

In regards to claim 54 and 108, the potentially desired content includes a

first content, a second content and a third content, wherein the method further

comprises: determining whether the recording of the first content has been

completed; simultaneously recording the second and the third content. See

Wood: [0032], [0037], [0038] and figure 2.

In regards to claim 55 and 109, the potentially desired content includes a

first content and a second content, wherein method further comprises:

performing on demand play back of the first and/or second content simultaneous

with the recording of the first and/or second content; and performing on demand

play back of the second and/or third content simultaneous with the recording of

the second and/or third content. See Wood: [0032], [0038].

In regards to claim 95, the apparatus further comprises: a display device

operatively connected to said at least one storage medium, said display device

receiving the played-back content from said at least one storage medium and

displaying the played-back content (i.e. video output source 107 coupled to the

video recorder device and storage medium (105). See Wood: [0032], [0029]).

In regards to claim 96, the apparatus comprises: receiving device and said

control unit being provided in a unit (i.e. VDR and processor 101 in one unit see

page 1 [0024]), said at least one storage medium external to the unit and

operatively connected to the unit (i.e. output source coupled to another video

data recorder, therefore external. See Wood: [0032].

8. Claims 32-33, 87-88 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Wood et al. (US Pre Grant Pub. 2002/0054752) in view of Liebenow (US Pat.

6,601,074), Ranta et al. (US PG Pub. 2005/020400) and Browne et al. (WO

92/22983) and further in view of Lewis (US Pre Grant Pub. 2005/0198677).

In regards to claims 32, 33 and 87 and 88, the modified system does not

comprise a loop established so that the instant replay is played repeatedly until

stopped by a user.

Lewis discloses the step of implementing instant replay in continuous loop

so that the instant replay is played repeatedly until stopped by a user. See

Lewis: [0229] and [0230].

It would have been obvious to one of ordinary skill in the art at the time of

the invention to further modify the system in view of Lewis' teachings by

implementing a continuous loop so that the instant replay is played repeatedly

until stopped by the user. The motivation is to allow the user to replay a time frame of a video regardless of how long a user has recorded a program.

In further regards to claims 33 and 88, the modified comprises the step of establishing instant replay loops however does not comprise a loop established so that the instant replay is played repeatedly until a certain number of loops have been completed.

Examiner takes official notice that it is well known to implement a loop into a finite loop that can be terminated after the iterations of certain number of loops.

It would have been obvious to one of ordinary skill in the art at the time of the invention to change the instant replay loop to a finite loop that can be terminated after certain number of loops have been completed. The motivation is to resume normal playback after the certain number of loops of instant replay have been played.

9. Claims 48, 51, 97-102, 105 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wood et al. (US Pre Grant Pub. 2002/0054752) in view of Liebenow (US Pat. 6,601,074), Ranta et al. (US PG Pub. 2005/0204400) and Browne et al. (WO 92/22983) and further in view of Gudesen (US Pat. 5,761,607).

In regards to claim 48 and 102, the modified system does not disclose that the storage medium is reconfigurable.

Gudesen discloses a personal video recording system, comprising mass storage at the user site, where the storage is expandable (using one or more

storage medium), removable, replaceable storage media, and therefore

reconfigurable. See column 4 lines 54-58, column 6 lines 20-27.

It would have been obvious to one of ordinary skill in the art at the time of

the invention to further modify the video recording system of Wood in view of

Gudesen's teaching by incorporating reconfigurable storage system that permits

storage media to be added, removed, replaced, etc. The motivation is to provide

easy scalability for increasing the storage capacity.

In regards to claims 51, 97, and 105, the modified system does not

disclose that the storage medium is expandable.

Gudesen discloses a personal video recording system, comprising mass

storage at the user site, where the storage is expandable (using one or more

storage medium), removable, and replaceable storage media, thereby

accommodating a larger video library. See column 4 lines 29-33, lines 54-58,

column 6 lines 20-27.

It would have been obvious to one of ordinary skill in the art at the time of

the invention to further modify the system of Wood in view of Gudesen's teaching

by incorporating an expandable storage system in order to provide easy

scalability for increasing the storage capacity.

In further regards to claim 98, since the storage device is removable,

replaceable and expandable, the storage device is modular.

In regards to claim 99 and 100, the modified system discloses

decompressing (decoding) compressed (encoded) video prior to playback (see

page 2 [0033], page 3 [0040]). Wood does not disclose that content can be

encrypted.

Gudesen discloses a personal video recording system where the storage

media, comprising encoder means for encrypting content prior to stored (see

column 4, lines 34-40), and decoder means for decrypting video for playback

(see column 4, lines 63-67).

It would have been obvious to one of ordinary skill in the art at the time of

the invention to further modify the system of Wood in view of Gudesen by

providing encryption means for encrypting data and decryption means for

decrypting the encrypted data. The motivation is to provide a fraud prevention

mechanism for preventing unauthorized access of data.

In regards to claim 101, the electronic program guide includes a port

(107) that receives program guide information. See Wood: [0026].

10. Claims 49, 103 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Wood (US Pre Grant Pub. 2002/0054752) in view of Liebenow (US Pat. 6,601,074),

Ranta et al. (US PG Pub. 2005/0204400) and Browne et al. (WO 92/22983) and

further in view of Halford (US Pat. 5,283,791).

In regards to claim 49 and 103, the modified system does not disclose the

step of synchronizing access of the at least one storage medium to avoid periods

of inaccessibility.

Halford teaches a method of synchronizing access to storage medium in a

disk array, in order to ensure that failure of any one storage device does not

interrupt the operation of storage and retrieval, thus providing a highly fault

tolerant storage device. See column 6, lines 18-25.

It would have been obvious to one of ordinary skill in the art at the time of

the invention to further modify the system of Wood in view of Halford by

synchronizing disk access in order to provide fault tolerance by guaranteeing disk

availability for storage and retrieval, even in case of a disk failure.'

11. Claims 52, 106 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Wood (US Pre Grant Pub. 2002/0054752) in view of, Liebenow (US Pat. 6,601,074)

Ranta et al. (US PG Pub. 2005/0204400) and Browne et al. (WO 92/22983) and

further in view of Hassell et al. (US Pre Grant Pub. 2004/0128658).

In regards to claims 52 and 106, the modified system does not disclose

that the at least one storage medium is automatically loaded.

Hassell teaches video playback system where when a user selects a

program that is not on the current disk then the system automatically loads the

disk containing the program, thereby providing 'juke-box' functionality. See page

8 [0089].

It would have been obvious to one of ordinary skill in the art to modify the

system with Hassell's teachings of automatically loading a storage medium in

order to retrieve a requested data. The motivation is to allow the system to

automatically determine the storage medium that a requested data is on and load

it for playback, thus alleviating the user from the burden of searching and

loading.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Orr (US Pat. 6,760,535) column 5, lines 22-29, lines 43-53, column 7,

lines 13-25; Agnihotri et al. (US Pat. 6,751,398) figure 4 and claims 1-4; and Arai

et al. (US Pat. 6,751,401) column 14, lines 45-51) various methods of managing

recording storage space by removing duplicate programs.

Watchfogel et al. (US PG Pub. 2007/0067800), paragraph [0019]

discloses a method of recording program for time shifted view upon pausing.

13. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to USHA RAMAN whose telephone number is

(571)272-7380. The examiner can normally be reached on Mon-Fri: 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331.

The fax phone number for the organization where this application or proceeding

is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chris Kelley/
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